

introducing a metal element capable of promoting crystallization of the amorphous semiconductor film to form a metal element added region;

crystallizing the amorphous semiconductor film to cause crystal growth to proceed in a crystal growth direction parallel to the insulating surface from the metal element added region thereby forming a crystalline semiconductor film;

patterning the crystalline semiconductor film to form at least a crystalline semiconductor island in which carriers move in a carrier moving direction identical with the crystal growth direction,

wherein the metal element added region is separated from the crystalline semiconductor island by a distance, and

wherein the metal element added region has a length that extends beyond an end portion of the crystalline semiconductor island in a longitudinal direction of the metal element added region.

7. (Amended) A method according to claim 6,

wherein the length of the metal element added region is set to 50% or more of a crystal growth distance.

sub 128 > 8. (Amended) A method according to claim 6,
wherein the metal element comprises at least one
element selected from Fe, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt, Cu and
Au.

sub 122 > 9. (Amended) A method of manufacturing a semiconductor
device, said method comprising:
forming an amorphous semiconductor film on an
insulating surface;
A' Cont. selectively introducing a metal element capable of
promoting crystallization of the amorphous semiconductor film
into at least a first region and a second region of the
amorphous semiconductor film to form a first metal element
introduced region and a second metal element introduced region,
respectively;
crystallizing the amorphous semiconductor film to
cause crystal growth to proceed in parallel to the insulating
surface from each of the first and second metal element
introduced regions to form a first crystalline semiconductor
region and a second crystalline semiconductor region;
forming at least an active region of the semiconductor
device in the first crystalline semiconductor region without

forming an active region at the second crystalline semiconductor region.

sub D8 10. (Amended) A method according to claim 9,
wherein the metal element comprises at least one
element selected from Fe, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt, Cu and
Au.

A'
Cont.
sub C3 11. (Amended) A method according to claim 9,
wherein the metal element is introduced by an ion
implanting method.

12. (Amended) A method according to claim 9,
wherein the metal element is introduced by coating a
solvent comprising the metal element.

Please add claims 14-23.

sub C4
A2 14. (New) A method according to claim 9, wherein the
semiconductor film comprises silicon.

sub D8 15. (New) A method according to claim 9,

wherein the semiconductor device includes at least one element selected from the group consisting of an n-channel thin film transistor and a p-channel thin film transistor,

wherein the n-channel thin film transistor has a first S value not higher than 90 mV/dec and the p-channel thin film transistor has a second S value not higher than 100 mV/dec.

16. (New) A method according to claim 9,

wherein the semiconductor device includes at least one element selected from the group consisting of an n-channel thin film transistor and a p-channel thin film transistor,

wherein the n-channel thin film transistor has a first S value not lower than 75 mV/dec and the p-channel thin film transistor has a second S value not lower than 75 mV/dec.

17. (New) A method according to claim 9,

wherein the semiconductor device is used in one or more of a portable telephone, a video camera, a mobile computer, a head mount display, a rear type projector, and a front type projector.

18. (New) A method according to claim 6, wherein the semiconductor film comprises silicon.

19. (New) A method according to claim 6,
wherein the metal element comprises at least one
element selected from Be, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt, Cu and
Au.

sub 28 *A2* *Cont.*
20. (New) A method according to claim 6,
wherein the semiconductor device comprises one or both
of an n-channel thin film transistor and a p-channel thin film
transistor,
wherein the n-channel thin film transistor has a first
S value not higher than 90 mV/dec and the p-channel thin film
transistor has a second S value not higher than 100 mV/dec.

21. (New) A method according to claim 6,
wherein the semiconductor device comprises one or both
of an n-channel thin film transistor and a p-channel thin film
transistor,
wherein the n-channel thin film transistor has a first
S value not lower than 75 mV/dec and the p-channel thin film
transistor has a second S value not lower than 75 mV/dec.

22. (New) A method according to claim 6,

wherein the semiconductor device is used in one or more of a portable telephone, a video camera, a mobile computer, a head mount display, a rear type projector, and a front type projector.

A2
Cond.
M/C4 >

23. (New) A method according to claim 9 further comprising controlling crystal growth state using the second metal element introduced region.
